



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Calvin F. Konzak et al.

Attorney Docket No.: KONC118530

Application No.: 10/042,932

Group Art Unit: 1661

Filed: January 8, 2002

Examiner: A.M. Grunberg

Title: METHOD FOR GENERATING DOUBLED HAPLOID PLANTS

DECLARATION OF CALVIN F. KONZAK

CALVIN F. KONZAK hereby declares that:

1. I am the Calvin F. Konzak named as an inventor of the above-captioned patent application and am familiar with the subject matter disclosed and claimed therein.
2. I am a Professor Emeritus at Washington State University. For 36 years I was a spring wheat breeder/agronomist/geneticist at Washington State University. A copy of my *Curriculum Vitae* is appended hereto as Attachment B.
3. It is my understanding that the Examiner argues that the specification of the above-referenced patent application, while being enabling for claims limited to wheat, does not reasonably provide enablement for claims broadly drawn to all plant varieties.
4. To the best of my knowledge, there is no impediment to the application of the methods disclosed in the above-referenced patent application to other plant species in addition to wheat.
5. I, and my collaborators, have successfully applied the methods described in the above-referenced patent application to produce rice plants from rice microspores. The successful method of making rice plants from rice microspores includes the following steps:
  - (a) Fresh rice tillers were selected that included rice microspores in the mid- to late-uninucleate stage of development.

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- (b) Plant material (Florets) including the microspores were incubated at 10°C for 8-14 days or at 33°C for 94-140 hours.
- (c) The florets containing the microspores were removed from tillers and were incubated in a liquid medium including 0.5mg/l 2HNA (a sporophytic development inducer) during the temperature stress step described in paragraph (b) *supra*.
- (d) The tissue containing the microspores was macerated in a blender, and the microspores in the macerated tissue were isolated by filtration and centrifugation.
- (e) The microspores were then cocultured with live wheat ovaries.
- (f) The cocultured microspores were then cultured to produce rice plants.

7. I hereby declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,

Date: 11/19/03



Calvin F. Konzak

BFM:jlj

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